FILE 'HOME' ENTERED AT 11:09:43 ON 15 FEB 2007

=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 11:09:52 ON 15 FEB 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5 DICTIONARY FILE UPDATES: 14 FEB 2007 HIGHEST RN 921041-62-5

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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http://www.cas.org/ONLINE/UG/regprops.html

```
=> E "AZELAIC ACID"/CN 25
E1
             1
                   AZELAHYDROXAMIC ACID, IRON COMPLEX/CN
E2
                   AZELAHYDROXIMIC ACID/CN
E3
             1 --> AZELAIC ACID/CN
E4
             1
                   AZELAIC ACID ALDEHYDE METHYL ESTER/CN
E5
             1
                   AZELAIC ACID ANHYDRIDE POLYMER/CN
E6
             1
                   AZELAIC ACID BARIUM SALT/CN
                   AZELAIC ACID BIS((1-METHYLCYCLOHEXYL)METHYL) ESTER/CN
E7
             1
                   AZELAIC ACID BIS(2,4-DINITROPHENYLHYDRAZIDE)/CN
E8
             1
                   AZELAIC ACID BIS (PHENYLHYDRAZIDE) / CN
E9
             1
                   AZELAIC ACID BIS (TETRAETHYLAMMONIUM) SALT/CN
E10
             1
E11
             1
                   AZELAIC ACID CHITOSAN SALT/CN
                   AZELAIC ACID CHLORIDE/CN
E12
            1
                   AZELAIC ACID CIS-1,4-CYCLOHEXANEDIMETHYLAMINE SALT (1:1)/CN
E13
             1
E14
             1
                   AZELAIC ACID DI(2-ETHYLHEXYL) ESTER/CN
E15
             1
                   AZELAIC ACID DICHLORIDE/CN
E16
             1
                   AZELAIC ACID DIHYDRAZIDE-DIBUTYLTIN DICHLORIDE POLYMER/CN
E17
             1
                   AZELAIC ACID DIHYDRAZIDE-ETHYLENE GLYCOL-MALEIC
ANHYDRIDE-PHTHALIC ANHYDRIDE COPOLYMER/CN
E18
             1
                   AZELAIC ACID DIHYDRAZIDE-PHENYLPHOSPHONIC DIISOCYANATE
COPOLYMER/CN
E19
             1
                   AZELAIC ACID DILITHIUM SALT/CN
E20
             1
                   AZELAIC ACID ETHANOLAMINE SALT/CN
E21
                   AZELAIC ACID HEXAMETHYLENEDIAMINE SALT-E-CAPROLACTAM
             1
COPOLYMER/CN
E22
             1
                   AZELAIC ACID ION(1-)/CN
E23
             1
                   AZELAIC ACID ION(2-)/CN
E24
             1
                   AZELAIC ACID LYSINE SALT/CN
E25
             1
                   AZELAIC ACID MONOAMIDE WITH MONO-6-DEOXY-6-AMINO-B-CYCLODEXTRIN
O-PERACETATE MONOESTER WITH N-HYDROXYSUCCINIMIDE/CN
```

```
=> S E3
L1
             1 "AZELAIC ACID"/CN
=> DIS L1 1 IDE
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
L1
RN
     123-99-9 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     Nonanedioic acid (9CI)
                             (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Azelaic acid (8CI)
OTHER NAMES:
     1,7-Dicarboxyheptane
CN
     1,7-Heptanedicarboxylic acid
CN
     1,9-Nonanedioic acid
CN
     Anchoic acid
CN
     Emerox 1144
CN
     Emery 1110
CN
     Empol 1144
CN
     Leparqylic acid
CN
     n-Nonanedioic acid
CN
     NSC 19493
CN
     Skinoren
CN
     ZK 62498
MF
     C9 H16 O4
CI
     COM
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
LC
     STN Files:
       BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE,
       ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, IFICDB, IFIPAT,
       IFIUDB, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NAPRALERT, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS*, SPECINFO, SYNTHLINE,
       TOXCENTER, USAN, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
                     DSL**, EINECS**, TSCA**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

 HO_2C^- (CH₂)₇ - CO_2H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3620 REFERENCES IN FILE CA (1907 TO DATE)
562 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3627 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 7.35 7.56

FULL ESTIMATED COST

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=> s 123-99-9 or azelaic(a)acid
 REG1stRY INITIATED

=> s 14(p)17

0 L4(P)L7

L9

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L33627 L2 5134 AZELAIC 4314120 ACID 1568872 ACIDS 4815460 ACID (ACID OR ACIDS) 4614 AZELAIC (A) ACID L4 5718 L3 OR AZELAIC(A) ACID => s steroid(a)hormone 112215 STEROID 113493 STEROIDS 170839 STEROID (STEROID OR STEROIDS) 285401 HORMONE 215721 HORMONES 396473 HORMONE (HORMONE OR HORMONES) L519033 STEROID (A) HORMONE => s 14 and 15 L6 0 L4 AND L5 => s corticosteroid 22346 CORTICOSTEROID 44334 CORTICOSTEROIDS L7 50452 CORTICOSTEROID (CORTICOSTEROID OR CORTICOSTEROIDS) => s 14 and 17 L8 29 L4 AND L7

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=> s 18 ti au so py 1-29
MISSING OPERATOR L8 TI
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> s ti au so py 1-29 18
MISSING OPERATOR 1-29 L8
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> s 14 and 17
            29 L4 AND L7
L10
=> d ti au so py 1-29
    ANSWER 1 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
ΤI
     Antibiotic kit and compositions
     Friedman, Doron; Besonov, Alex; Tamarkin, Dov; Eini, Meir
IN
SO
     U.S. Pat. Appl. Publ., 31pp., Cont.-in-part of U.S. Ser. No. 532,618.
     CODEN: USXXCO
PΥ
     2006
     2004
     2004
     2005
     2006
L10
    ANSWER 2 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
ΤI
     Controlled release implant comprising biocompatible polymer for ocular
IN
     Dadey, Eric; Lindemann, Christopher M.; Warren, Stephen L.; Norton,
     Richard L.
so
     U.S. Pat. Appl. Publ., 36pp.
     CODEN: USXXCO
PΥ
     2006
     ANSWER 3 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
     Film forming foamable pharmaceutical and cosmetic compositions and
TI
     cosmetic and therapeutic uses thereof
IN
     Tamarkin, Dov; Friedman, Doron; Eini, Meir
SO
     U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of U.S. Ser. No. 922,358.
     CODEN: USXXCO
PΥ
     2006
     2004
     2004
     2005
     2005
    ANSWER 4 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
     Granulysin peptides and methods of use thereof
ΤI
IN
     Kim, Jenny J.
SO
     PCT Int. Appl., 40pp.
     CODEN: PIXXD2
PY
     2006
     2007
L10
    ANSWER 5 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
    Method and device for ophthalmic administration of active pharmaceutical
ΤI
     Gross, Yossi; Herzog, Rafi; Koevary, Steven B.
IN
SO
     PCT Int. Appl., 127pp.
     CODEN: PIXXD2
PΥ
     2006
```

2007

```
L10 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Pharmaceutical compositions comprising o-acetylsalicyl derivatives of
ΤI
     amino saccharides and amino acids
IN
     Yu, Ruey J.; Van Scott, Eugene J.
     PCT Int. Appl., 56 pp.
SO
     CODEN: PIXXD2
     2006
PY
     2006
L10
     ANSWER 7 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Novel dosage form comprising modified-release and immediate-release active
     ingredients
TN
     Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar
SO
     U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.
     CODEN: USXXCO
PΥ
     2006
     2004
     2004
L10
     ANSWER 8 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Bioavailability and improved delivery of alkaline pharmaceutical drugs
TΙ
IN
     Yu, Ruey J.; Van Scott, Eugene J.
SO
     U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 792,273.
     CODEN: USXXCO
PΥ
     2005
     2004
     2006
L10
    ANSWER 9 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
TI
     Dermal drug delivery system
IN
     Brown, Marc Barry; Martin, Gary Peter
SO
     PCT Int. Appl., 53 pp.
     CODEN: PIXXD2
PΥ
     2005
     2005
     2006
     ANSWER 10 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
TI
     Enlargement of mucocutaneous or cutaneous organs and sites with topical
     compositions containing N-acyl-aldosamine or N-acylamino acid compounds
TN
     Yu, Ruey J.; Van Scott, Eugene J.
     PCT Int. Appl., 52 pp.
SO
     CODEN: PIXXD2
PY
     2005
     2004
     2005
     ANSWER 11 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
TI
     Penetrating pharmaceutical foam
IN
     Tamarkin, Dov; Friedman, Doron; Eini, Meir
so
     PCT Int. Appl., 68 pp.
     CODEN: PIXXD2
PY
     2005
     2005
     2005
     2005
     2006
     2006
     2006
L10 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
```

Method for the treatment or prevention of dermatological disorders with a

cyclooxygenase-2 inhibitor alone and in combination with a dermatological

ΤI

```
treatment agent and compositions therewith
     Pulaski, Steven P.
IN
SO
     U.S. Pat. Appl. Publ., 68 pp.
     CODEN: USXXCO
PΥ
     2005
     2005
     2005
     ANSWER 13 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΤI
     Transdermal delivery system for cosmetic agents
     Levin, Galit; Sacks, Hagit; Rudaev, Sergey
IN
     PCT Int. Appl., 45 pp.
SO
     CODEN: PIXXD2
PΥ
     2004
     2005
L10
     ANSWER 14 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Compositions and methods for treatment of rosacea
ΤI
IN
     Patt, Leonard M.
SO
     U.S. Pat. Appl. Publ., 11 pp.
     CODEN: USXXCO
PΥ
     2004
     2005
     2005
     2005
     2005
     2006
     2005
L10 · ANSWER 15 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Pharmaceutical preparation useful for treating tumors and lesions of the
     skin and the mucous membranes and methods and kits using same
IN
     Burstein, Pinchas
SO
     U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S. Ser. No. 968,771.
     CODEN: USXXCO
PY
     2004
     2003
     2006
     2003
     2004
L10
     ANSWER 16 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Novel conjugate compounds and dermatological compositions thereof
TТ
IN
     Tamarkin, Dov
     U.S. Pat. Appl. Publ., 18 pp.
SO
     CODEN: USXXCO
PΥ
     2004
     ANSWER 17 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
     Acidic drug complexes for improved bioavailability and delivery
TI
IN
     Yu, Ruey J.; Van Scott, Eugene J.
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
PY
     2004
     2004
     2004
     2004
     2004
     2005
L10
     ANSWER 18 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
ΤI
     Improved bioavailability and improved delivery of alkaline drugs
IN
     Yu, Ruey J.; Van Scott, Eugene J.
SO
     PCT Int. Appl., 41 pp.
```

```
CODEN: PIXXD2
PΥ
     2004
     2004
     2004
     2004
     2005
    ANSWER 19 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
TI
     N-Acetyl cysteine and its topical use
     Yu, Ruey J.; Van Scott, Eugene J.
IN
SO
     U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. Pat. Appl. 2003
     198,656.
     CODEN: USXXCO
PΥ
     2003
     2000
     2005
     2005
     2006
     2003
     2003
     2004
L10
    ANSWER 20 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
ΤI
     Urea compositions for the treatment of skin disorders
     Yu, Ruey J.; Van Scott, Eugene J.
IN
     PCT Int. Appl., 39 pp.
so
     CODEN: PIXXD2
PY
     2003
     2004
     2003
     2003
     2004
     2005
L10
     ANSWER 21 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Topical pharmaceuticals for the treatment of inflammatory dermatoses
ΤI
     Maibach, Howard I.; Luo, Eric C.; Hsu, Tsung-Min
IN
SO
     U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 972,008.
     CODEN: USXXCO
PΥ
     2003
     2001
     2003
     2002
     2004
     2002
     2003
     2003
     2003
     2004
     2005
    ANSWER 22 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
     Methods and trefoil peptide compositions for treating dermal lesions
TI
IN
     Podolsky, Daniel K.
SO
     PCT Int. Appl., 47 pp.
     CODEN: PIXXD2
PY
     2003
     2003
     2003
     2004
     2005
     2005
```

L10 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

```
ΤI
     Pharmaceutical preparations useful for treating tumors and lesions of the
     skin and the mucous membranes and methods and kits using same
IN
     Burstein, Pinchas
     PCT Int. Appl., 67 pp.
SO
     CODEN: PIXXD2
PΥ
     2003
     2004
     2003
     2006
     2003
     2004
     2004
L10 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Pharmaceutical and cosmetic compositions containing oligosaccharide
     aldonic acids and their topical use
     Yu, Ruey J.; Van Scott, Eugene J.
IN
     PCT Int. Appl., 86 pp.
SO
     CODEN: PIXXD2
PΥ
     2001
     2001
     2002
     2001
     2002
     2002
     2006
     2003
     2004
     2005
     2006
     2006
     2006
     2002
     2004
     2006
     2004
     2004
     2005
L10 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Topical delivery systems for active agents
ΤI
IN
     Niemiec, Susan M.; Wang, Jonas C. T.; Wisniewski, Stephen J.; Stenn, Kurt
     S.; Lu, Gwang Wei
     PCT Int. Appl., 56 pp.
SO
     CODEN: PIXXD2
PΥ
     2000
     2000
     2001
     2000
     2000
     2001
     2003
     2002
     2002
     ANSWER 26 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
     Pyridine thiols reverse mucocutaneous aging
ΤI
IN
     Thornfeldt, Carl R.
SO
     PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
ΡY
     1998
     2000
     1998
     2002
```

```
ANSWER 27 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
L10
ΤI
     Biologically active stick composition
     Lindahl, Ake; Bryland, Rickard
IN
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
PY
     1997
     1997
     2007
     1997
     1999
     1997
     1999
     2006
     2000
     2006
     2005
L10 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Topical pharmaceutical preparation containing glycerol nitrate as
     penetration enhancer
     Dannhardt, G.; Dunzendorfer, Udo
IN
     Ger. Offen., 4 pp.
so :
     CODEN: GWXXBX
PΥ
     1993
L10 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
     Alkylation of brain corticosteroid acetyltransferase by
    17-hydroxyprogesterone-17-(9-oxo-10-chlorodecanoate) and related compounds
ΑU
     Purdy, Robert H.; Rao, P. Narasimha; Zoeller, Jerome H., Jr.
SO
     Steroids (1973), 22(1), 139-50
     CODEN: STEDAM; ISSN: 0039-128X
PΥ
     1973
=> s vitamin(a)e or vitamin(a)d
        196450 VITAMIN
         56496 VITAMINS
        218415 VITAMIN
                  (VITAMIN OR VITAMINS)
       2004621 E
         34778 VITAMIN(A)E
        196450 VITAMIN
         56496 VITAMINS
        218415 VITAMIN
                  (VITAMIN OR VITAMINS)
       2411660 D
         27208 VITAMIN(A)D
L11
         59834 VITAMIN(A) E OR VITAMIN(A) D
·=> d his
     (FILE 'HOME' ENTERED AT 11:09:43 ON 15 FEB 2007)
     FILE 'REGISTRY' ENTERED AT 11:09:52 ON 15 FEB 2007
                E "AZELAIC ACID"/CN 25
Ll
              1 S E3
     FILE 'CAPLUS' ENTERED AT 11:10:36 ON 15 FEB 2007
                S 123-99-9/REG# OR AZELAIC(A)ACID
     FILE 'REGISTRY' ENTERED AT 11:11:42 ON 15 FEB 2007
1.2
              1 S 123-99-9/RN
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FILE 'CAPLUS' ENTERED AT 11:11:42 ON 15 FEB 2007
L3
           3627 S L2
L4
           5718 S L3 OR AZELAIC(A) ACID
L5
          19033 S STEROID (A) HORMONE
L6
              0 S L4 AND L5
L7
          50452 S CORTICOSTEROID
L8
             29 S L4 AND L7
L9
              0 S L4(P)L7
L10
             29 S L4 AND L7
L11
          59834 S VITAMIN(A)E OR VITAMIN(A)D
=> s 14 ans 111
MISSING OPERATOR L4 ANS
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.
=> d l4 and l11
L11 IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY".
=> s 14 and 111
            72 L4 AND L11
L12
=> s 14(p)111
             6 L4(P)L11
=> d ti au abs so py 1-6
     ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI
     Cosmetic composition comprising hydrophobic and hydrophilic silica
     particles
IN
     Inqman, Dov
AB
     The present invention relates to a new topical cosmetic composition formulated
     for concealing wrinkles and for eliminating or reducing damages to the
     skin appearance resulted from a wide variety of disorders, such as for
     example, acne. The composition comprises water, optionally containing 25 to
400
     ppm of Ag, hydrophobic particles, preferably hydrophobic silica, having a
     diameter, ranged from about 5 to about 150 nm, and/or hydrophilic particles,
     preferably hydrophilic silica, having a diameter, ranged from about 5 to
     about 150 nm and a soluble electrolyte, capable of releasing free ions in an
     aqueous environment. Thus, a hypotonic composition for treating acne comprised
     Dead Sea salt 0.2, zinc sulfate 1, hydrophobic silica 5, hydrophilic
     silica 5, tea tree oil 2, sea buckthorn oil 3, vitamin A 0.1, vitamin C
     1.5, vitamin E acetate 0.1, methylparaben 0.1,
     propylene glycol 2, and water 80%, resp. A composition comprising water,
     optionally containing Ag 25 to 400 ppm, 10 weight% Aerosil 380, 2.5 weight%
Aerosil
     R812, 1 to 20 weight% Dead Sea salt, and optionally one or more conventional
     skincare and/or anti-acne agent, selected from evening primrose oil, sweet
     almond oil, sea buckthorn oil, tea tree oil, Finsolv TN, (C12-15 alkyl
     benzoate), octyl hydroxystearate, salicylic acid, vitamin C, citric
     acid, azelaic acid, benzoyl peroxide, zinc
     acetate and sulfur. The composition was highly effective in treating acne.
     The concentration of the salt in such composition was determined according to
the treated
     skin type (dried, oily, etc.) and the particular acne type, grade and
     state of the treated individual. Compns. containing higher concns. of salt
     (10 to 20 weight%) are preferred for treating an oily skin and an intensive
     acne state.
SO
    Eur. Pat. Appl., 30 pp.
    CODEN: EPXXDW
PΥ
    2006
```

2006

- L13 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Use of N,N1-bis(2-hydroxyethyl)nonandiamide as a cosmetic agent
- IN Comelli, Cristina; Della Valle, Maria Federica; Della Valle, Francesco; Marcolongo, Gabriele
- AB The present invention relates to the use of N,N1-bis(2-hydroxyethyl) nonandiamide, the common international name of which is adelmidrol, as a cosmetic agent for use on skin and/or mucous membranes which are irritable and/or are subject to acute irritation, in man and in animals. The present invention also relates to a method for the preparation of N,N1-bis(2-hydroxyethyl) nonandiamide, comprising the reaction of azelaic acid or of a diester thereof with ethanolamine in an inert atmospheric, possibly on the presence of an inert solvent. This method enables adelmidrol to be produced in a particularly pure form suitable for its use in the cosmetic field. A face or body cream containing adelmidrol 2, vitamin E acetate 4, sodium hyaluronate
 0.04, bronopol 0.005, hydrogenated castor oil 40 1.5, noveon AA1 1.6, o-phenylphenol 0.18, aroma 0.15, and water q.s. to 100 % was prepared
- SO PCT Int. Appl., 29 pp. CODEN: PIXXD2

PY 2001

2002

2005

2005

2005

2005

- L13 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Blood antioxidant status and urinary levels of catecholamine metabolites in $\beta\text{-thalassemia}$
- AU De Luca, Chiara; Filosa, Aldo; Grandinetti, Mauro; Maggio, Francesco; Lamba, Marta; Passi, Siro
- AB It has been reported that iron overload in β-thalassemia leads to an enhanced generation of reactive oxygen species and to oxidative stress. We have studied the oxidant/antioxidant imbalance in the blood of 48 transfusion-dependent β-thalassemic patients (TLP) (17 males, 31 females, 11-22 yr), under chelation therapy, and in 40 sex and age matched healthy controls (CTR). Plasma and lymphocyte levels of vitamin E (Vit E), ubiquinol (CoQ10H2), ubiquinone (CoQ10), plasma concns. of vitamin A (Vit A), β-carotene, lycopene, vitamin C (Vit C), total thiols, fatty acid patterns of phospholipids (PL-FA), and plasma and urinary markers of lipoperoxidn. (TBA-RM), conjugated dienes, and azelaic acid (AZA), as well as the urinary levels of catecholamine and serotonin metabolites, were evaluated by gas chromatog.-mass spectrometry (GC-MS), HPLC and spectrophotometry. Routine laboratory blood analyses were performed on the same samples; 39/48 TLP were

HCV

pos. Blood samples were collected just before transfusion, the 24 h urine samples the day before. Our results clearly showed that a severe oxidative stress occurs in the plasma of TLP in comparison with CTR. fact, the levels of lipophilic antioxidants and ascorbate were severely -depleted: CoQ10H2 (-62.5%), total CoQ10 (-35.1%), Vit E (-43.8%), β-carotene (-31.1%), lycopene (-63.7%), Vit A (-35.9%), Vit C (-23.1%). The impairment of the antioxidant status was associated with elevated plasma levels of byproducts of lipoperoxidn. and urinary concns. of catecholamine metabolites and of AZA, indicating a high degree of both neurol. stress and lipoperoxidn. A significant pos. correlation was found between vitamin E and non-transferrin-bound iron (NTBI) (r = -0.81; p < 0.001), while no correlation was found between antioxidant depletion and ferritin serum levels, average blood consumption, or the presence of clin. complications. The administration of selective antioxidants along with an appropriate diet might represent a promising way of counteracting oxidative damage and its deleterious effects on the

progression of the disease.

SO Free Radical Research (1999), 30(6), 453-462 CODEN: FRARER; ISSN: 1071-5762

PY 1999

L13 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

TI Topical formulations for treatment of acne

- IN Shirane, Miyako; Egawa, Yuichiro; Maeno, Kiyoshi
- AB A topical formulation contains (1) ≥1 compound selected from the group comprising succinic acid, azelaic acid, sebacic acid vitamin E derivs., and salts thereof, and (2) an agent, for microbicidal activity, selected from the group comprising S, salicylic acid, lactic acid, urea, chlorhexidine gluconate, isopropylmethylphenol, and triclosan, for the treatment of acne. Thus, a skin lotion was prepared containing succinic acid vitamin E monoester Na salt 0.5 and salicylic acid 0.05% by weight, and therapeutic activity shown.
- SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

- PY 1991
- L13 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Skin-lightening cosmetics containing vitamin E esters and L-ascorbic acid derivatives
- IN Shinoki, Misa; Hikima, Toshio; Maeno, Kiyoshi
- AB Skin-lightening cosmetics contain vitamin E esters with azelaic acid and L-ascorbic acid sulfate salts and/or L-ascorbic acid phosphate salts. Vitamin E-azelaic acid monoester Na salt 0.5, L-ascorbic acid 2-phosphate Mg salt 0.5, polyoxyethylene hydrogenated castor oil 0.5, glycerin 5.0, EtOH 7.0, methylparaben 0.1, and H2O to 100 weight% were mixed to give a cosmetic lotion, which did not cause erythema on human skin and showed good skin-lightening effect.
- SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

Ι

PY 1991

- L13 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Cosmetics with skin-lightening properties containing kojic acid derivatives and melanin synthesis-inhibiting compounds
- IN Oyama, Yasuaki

GI

AB Cosmetics for topical use which have melanin synthesis-inhibiting activity comprise kojic acid or its esters (I; R1, R2 = C1-20-acyl, or one of R1, R2 = H and the other is C3-20-acyl) and ≥1 compds. selected from azelaic acid, tropolone, lipoic acid, sorbic acid, glucosamine, glucosamine derivs., tunicamycin, deoxynorjirimicyn, glutathione, cysteine, hydroquinone, derivs. of hydroquinone, dehydroacetic acid, chelidonic acid, and lipoamide. An ointment contained polyoxyethylene (60) monostearate 1.00, polyoxyethylene (60) sorbitol tetraoleate 1.50, glycerol monostearate 1.50, bees wax 2.00, paraffin 2.00, stearic acid 3.00, behenyl alc. 3.00, shea butter 12.00, liquid paraffin 5.00, natural vitamin E 0.04, Me polysiloxane

0.01, kojic acid monobenzoate 3.00, antiseptics, fragrance, 1,3-butylene glycol 5.00, citric acid, 0.30, Na dl-lauroyl-1-glutamate 0.50, lipoic acid 2.00, and H2O to 100%. The cosmetics have skin-whitening and antisuntan properties. Kojic acid and its esters are tyrosinase inhibitors and the combination with the other particular compds. mentioned here is synergistic.

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

PY 1989

1989

1996

1989

1991

1989

1991

```
ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
L1
RN
     123-99-9 REGISTRY
ED
     Entered STN: 16 Nov 1984
    Nonanedioic acid (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
    Azelaic acid (8CI)
CN
OTHER NAMES:
     1,7-Dicarboxyheptane
CN
     1,7-Heptanedicarboxylic acid
CN
CN
     1,9-Nonanedioic acid
     Anchoic acid
CN
CN
     Emerox 1144
CN
    Emery 1110
CN
    Empol 1144
CN
     Lepargylic acid
CN
     n-Nonanedioic acid
CN
     NSC 19493
CN
     Skinoren
CN
     ZK 62498
MF
     C9 H16 O4
CI
     COM
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
LC
       BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE,
       ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, IFICDB, IFIPAT,
       IFIUDB, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NAPRALERT, PHAR, PIRA, PROMT, PROUSDDR, PS, RTECS*, SPECINFO, SYNTHLINE,
       TOXCENTER, USAN, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

 HO_2C^- (CH₂)₇ - CO_2H

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3616 REFERENCES IN FILE CA (1907 TO DATE)
561 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3625 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
acetate 3093-35-4, Halcinonide
                                  3604-87-3, Ecdysone
3625-07-8, Mebolazine
                      3836-23-5, Norethisterone enanthate
4140-20-9, Estrapronicate
                           4705-29-7, 5β-Stigmastane
4732-76-7, Gonane
                   4956-37-0, Estradiol enanthate
5119-48-2, Withaferin a
                         5367-84-0, Clomegestone
5593-20-4, Betamethasone dipropionate
                                      5721-91-5,
Testosterone decanoate 5949-44-0, Testosterone undecylate
6533-00-2, Norgestrel 6540-49-4, Pseudotigogenin
6929-17-5, 5\alpha-Cholane 6990-06-3, Fusidic acid
11040-28-1
            13563-60-5, Norgesterone
                                       13698-49-2.
Delmadinone acetate 14144-06-0, Disogluside
                                              15262-77-8,
             15262-86-9, Testosterone isocaproate
Delmadinone
15500-66-0, Pancuronium bromide
                                 16320-04-0, Gestrinone
17230-88-5, Danazol 19043-95-9, α-Sitostanol
19356-17-3, Calcidiol 19888-56-3, Fluazacort
             22298-29-9, Betamethasone 17-benzoate
Ercalcidiol
22888-37-5, 5\alpha-Poriferastane
                              23290-26-8, Avenasterol
23983-43-9, Prasterone enanthate
                                25122-46-7, Clobetasol
17-propionate 25122-57-0, Clobetasone 17-butyrate
28014-46-2, Polyestradiol phosphate
                                   28572-75-0
31477-60-8, Ormeloxifene 32222-06-3, Calcitriol
33124-50-4, Fluocortin 33396-37-1, Meproscillarin
                       38778-30-2, Muristerone
36983-69-4, Actodigin
40957-83-3, Glycitein 41294-56-8 42607-12-5, Isovitamin
     50629-82-8, Halometasone
                             50648-94-7,
1,24,25-Trihydroxycholecalciferol 50897-35-3,
              54024-22-5, Desogestrel
5α-Campestane
                                       56143-37-4
56720-87-7 58652-20-3, Nomegestrol acetate 58917-69-4,
5\beta-Campestane 59497-39-1, Naflocort 60023-92-9,
Roxibolone 60133-18-8, 1α,25-Dihydroxyergocalciferol
60282-87-3, Gestodene 62446-14-4 63819-58-9
65928-58-7, Dienogest 66734-13-2, Alclometasone
              67332-38-1, Androstanediol
dipropionate
                                         67392-87-4,
Drospirenone
              67696-82-6, Acrihellin 69575-63-9
71761-06-3, Vitamin D5 72962-43-7, Brassinolide
73771-04-7, Prednicarbate 80373-86-0 83919-23-7,
Mometasone furoate 86401-95-8, Methylprednisolone
aceponate
          87116-72-1, Timobesone 87952-98-5, Mespirenone
98651-66-2, Halobetasol 138126-65-5, Stigmastanol
375800-36-5, Chalinosterol 681126-58-9 874187-07-2
ROLE: THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
   (steroid kit and foamable composition)
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ACCESSION NUMBER:
                         2004:802249 CAPLUS
DOCUMENT NUMBER:
                         141:282454
ENTRY DATE:
                         Entered STN: 01 Oct 2004
TITLE:
                         Novel conjugate compounds and dermatological
                         compositions thereof
INVENTOR(S):
                         Tamarkin, Dov
PATENT ASSIGNEE(S):
                         Israel
SOURCE:
                         U.S. Pat. Appl. Publ., 18 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
INT. PATENT CLASSIF.:
            MAIN:
                         A61K007-135
                         A61K031-59; A61K031-355
       SECONDARY:
US PATENT CLASSIF.:
                         424062000; 514167000; 514179000; 514458000
CLASSIFICATION:
                         62-4 (Essential Oils and Cosmetics)
```

Section cross-reference(s): 2, 63

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 2004191196 PRIORITY APPLN. IN PATENT CLASSIFICAT	5 A1 NFO.:				20031216	
	CLASS PATENT	FAMILY CLAS	SIFICATION CODES			
US 2004191196	ICM A61K007 ICS A61K031 INCL 4240620 IPCI A61K000 [ICS,7] IPCR A61K000 [I,A]; A61K003	-59; A61K03 000; 5141670 07-135 [ICM, ; A61K0031- 88-30 [I,C*] A61K0031-35	1-355 00; 514179000; 514458 7]; A61K0031-59 [ICS, 352 [ICS,7,C*] ; A61K0008-63 [I,A]; 2 [I,C*]; A61K0031-35 A61K0031-59 [I,C*]; [I,C*]; A61Q0019-02	7]; A61 55 [A61	A61K0031-355 K0008-67 I,A]; Q0019-00	
	NCL 424/062 ECLA A61K008	.000; 514/1 6/63; A61K00	67.000; 514/179.000; 8/67; A61K008/67L; A6	1K0	31/355;	
A61K031/59; A61K047/48H4C; A61Q019/00; A61Q019/02 ABSTRACT: The invention relates to novel cosmetic and dermatol. compns., comprising conjugate compds., including a dicarboxylic acid moiety, which is covalently linked through covalent bonds to a biol. active alc., selected from the group of steroidal hormones, steroidal anti-inflammatory agents, vitamin E and vitamin D.						
SUPPL. TERM: INDEX TERM:	Skin, diseas	e .	osmetic drug skin dis eroid-dicarboxylate o			
INDEX TERM:	cosmetic Cosmetics (antiagin	and dermato g; steroid-	l. application) dicarboxylate conjuga			
INDEX TERM:	Infection (bacteria	tol. application. 1; steroid-catol. application.	dicarboxylate conjuga	ite	for cosmetic	
INDEX TERM:	Skin (cellulit		dicarboxylate conjuga	ite	for cosmetic	
INDEX TERM:	Cosmetics (creams;		arboxylate conjugate	for	cosmetic and	
INDEX TERM:	Infection (cutaneou	s; steroid-	dicarboxylate conjuga	ite	for cosmetic	
INDEX TERM:	Carboxylic a ROLE: COS (C (Biological	osmetic use study); USE:	gical studies); THU (Therapeutic u			
INDEX TERM:	for cosme Corticostero ROLE: COS (C (Biological (esters;	tic and deri ids, biolog osmetic use study); USE	matol. application) ical studies); THU (Therapeutic u S (Uses) arboxylate conjugate	se)	; BIOL	
INDEX TERM:	Sebum (excess s	ecretion of	; steroid-dicarboxyla	te (conjugate for	
INDEX TERM:	Cosmetics Drug deliver (gels; st	y systems	l. application) poxylate conjugate fo	r co	osmetic and	

INDEX TERM: Steroids, biological studies ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hormones, esters; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Skin (hyperkeratinization; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Skin, disease (hyperpigmentation; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Skin, disease (hypertrophic scar; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Skin, disease (infection; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Cosmetics Drug delivery systems (lotions; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) Skin, disease INDEX TERM: (melasma; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Drug delivery systems (ointments, creams; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) Hormones, animal, biological studies INDEX TERM: ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (steroid, esters; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Acne Aerosols Cosmetics Dermatitis Foams Mycosis Obesity Skin, disease (steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Skin (stratum corneum, hypertrophy; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Blood vessel, disease (telangiectasia; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Soaps ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (toilet; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: Drug delivery systems (topical; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: 58-22-0, Testosterone ROLE: BSU (Biological study, unclassified); BIOL (Biological study) (conversion to dihydrotestosterone; steroid-dicarboxylate conjugate for cosmetic and dermatol. application) INDEX TERM: 111-16-0D, Pimelic acid, esters 111-20-6D, Sebacic acid, esters 123-99-9D, Azelaic acid, esters 124-04-9D, Adipic acid, esters 505-48-6D, Suberic acid,

esters 505-52-2D, 1,13-Tridecanedioic acid, esters

821-38-5D, 1,14-Tetradecanedioic acid, esters 1406-16-2D,

Vitamin d, esters 1406-18-4D, Vitamin e, esters ROLE: COS (Cosmetic use); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(steroid-dicarboxylate conjugate for cosmetic

and dermatol. application)

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:482398 CAPLUS

DOCUMENT NUMBER: 131:254466

ENTRY DATE: Entered STN: 04 Aug 1999

TITLE: GC analysis of steroids, fatty acids, organic acids,

and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of

metabolic disorders

AUTHOR(S): Agatha, G.; Kauf, E.

CORPORATE SOURCE: Dep. Pediatrics, Endocrinology Metabolism, Children's

Hospital Jussuf Ibrahim, Univ. Jena, Jena, D-07745,

Germany

SOURCE: Clinical Laboratory (Heidelberg) (1999), 45(7/8),

387-397

CODEN: CLLAFP

PUBLISHER: Clin Lab Publications

DOCUMENT TYPE: Journal LANGUAGE: English

CLASSIFICATION: 9-3 (Biochemical Methods)

Section cross-reference(s): 14

ABSTRACT:

The application of microwave irradiation is described for rapid derivatization of steroids, fatty acids, organic acids and catecholamine metabolites for the diagnosis of metabolic disorders. Microwave accelerated derivatization is rapid and complete, and the products formed under microwave irradiation are identical with the products formed under conventional reaction conditions, as evidenced by similar gas chromatog. retention times. The one-step methanolysis of lipids from plasma and erythrocytes with HCl/CH3OH (1M) using a microwave oven does not result in significant degradation of polyunsatd. fatty acids, even in the presence of oxygen. Capillary gas chromatog. profiles of steroids, organic acids and fatty acids for the clin. diagnosis of several diseases are discussed.

SUPPL. TERM: metabolic disorder microwave GC blood analysis

INDEX TERM: Blood analysis
Gas chromatography

Gas chromatograph Microwave

Urine analysis

(GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Fatty acids, analysis

Lipids, analysis Steroids, analysis

ROLE: ANT (Analyte); BSU (Biological study, unclassified);

ANST (Analytical study); BIOL (Biological study)

(GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM: Nervous system

(Refsum disease; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave

accelerated derivatization for the diagnosis of metabolic

disorders)

INDEX TERM: Metabolism, animal.

(disorder, glutaric aciduria type I; GC anal. of

```
steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)
```

INDEX TERM:

Metabolism, animal

(disorder; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM:

Catecholamines, analysis
ROLE: ANT (Analyte); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study)
 (metabolites; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM:

Nerve, neoplasm

(neuroblastoma; GC anal. of steroids, fatty acids, organic acids, and catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders)

INDEX TERM:

Acids, analysis
ROLE: ANT (Analyte); BSU (Biological study, unclassified);
ANST (Analytical study); BIOL (Biological study)
(organic; GC anal. of steroids, fatty acids, organic acids,

and

INDEX TERM:

catecholamine metabolites with microwave accelerated derivatization for the diagnosis of metabolic disorders) 50-23-7, Cortisol 53-02-1, Tetrahydrocortisol Tetrahydrocortisone 53-41-8, Androsterone 53-42-9, Etiocholanolone 53-43-0, Dehydroepiandrosterone Vanillylmandelic acid 57-10-3, Hexadecanoic acid, analysis 57-11-4, Octadecanoic acid, analysis 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, analysis Benzoic acid, analysis 65-86-1 68-42-8, Tetrahydrocorticosterone 68-60-0, Tetrahydro-11desoxycortisol 69-72-7, analysis 72-23-1, Dehydrocorticosterone 80-92-2, Pregnanediol Stigmasterol 109-52-4, Pentanoic acid, analysis 110-15-6, Butanedioic acid, analysis 110-16-7, 2-Butenedioic acid (2Z)-, analysis 110-94-1, Pentanedioic 111-20-6, Decanedioic acid, analysis 112-37-8, Undecanoic acid 112-80-1, 9-Octadecenoic acid (9Z)-, analysis 112-85-6, Docosanoic acid 123-99-9, Nonanedioic acid, analysis 124-04-9, Hexanedioic acid, analysis 127-17-3, analysis 143-07-7, Dodecanoic acid, analysis 302-91-0, Allo-Tetrahydrocortisol 306-08-1, Homovanillic acid 373-49-9 463-40-1 495-69-2, Hippuric 506-30-9, Eicosanoic acid 506-32-1 516-05-2, Methylmalonic acid 516-38-1, α -Cortol 516-42-7, α -Cortolone 520-88-7, 16 α -Hydroxypregnenolone 521-13-1, Cholesterolbutyrate 544-63-8, Tetradecanoic acid, analysis 557-59-5, Tetracosanoic acid 571-20-0, 5α-Androstane- 3β , 17β -diol 600-63-5, AlloTetrahydrocorticosterone 667-66-3, β-Cortolone 901-56-4, Pregnenediol 1098-45-9, Pregnanetriol 1719-79-5, 20α-Hydroxycortisol 1783-84-2 1963-03-7, Androst-5-ene-3,17-diol, $(3\beta,17\alpha)$ -2313-14-6, 4,7,10,13,16-Docosapentaenoic acid 2791-29-9 3272-49-9, 11-Hydroxyetiocholanolone 4150-30-5, Androstenetriol 5561-99-9 **5**598-38**-**9 6217-54-5 6609-97-8, 17-Hydroxypregnanolone 7432-41-9 10417-94-4 14620-55-4 14721-66-5, Phytanic acid 20290-75-9 24880-40-8 24880-45-3 28874-58-0

68392-85-8, 11-Oxopregnanetriol

```
ROLE: ANT (Analyte); BSU (Biological study, unclassified);
                   ANST (Analytical study); BIOL (Biological study)
                       (GC anal. of steroids, fatty acids, organic acids,
                      and catecholamine metabolites with microwave accelerated
                      derivatization for the diagnosis of metabolic disorders)
REFERENCE COUNT:
                         THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
                         RECORD.
REFERENCE(S):
                   (1) Aoyama, T; Biochem Biophys Res Commun 1994, V201, P1541
                             CAPLUS
                    (2) Brink, H; J Lipid Res 1992, V33, P1449
                    (3) Campistol, J; J Pediatr 1992, V121, P83 MEDLINE
                   (4) Dasgupta, A; Chemistry and Physics of Lipids 1992, V62,
                             P281 CAPLUS
                    (5) Homoki, J; Klin Wochenschr 1987, V65, P719 MEDLINE
                    (6) Ijlst, L; Ann Clin Biochem 1993, V30, P293 CAPLUS
                    (7) Lepage, G; J Lipid Res 1986, V27, P114 CAPLUS
                    (8) Martinez, G; Clinica Chimica Acta 1997, V267, P143
                             CAPLUS
                   (9) Millington, D; New Developments in Fatty Acid Oxidation
                             1992, P339 CAPLUS
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                   (11) Onkenhout, W; Clin Chem 1995, V41, P1467 CAPLUS
                   (12) Pahan, K; J Lipid Res 1996, V37, P1137 CAPLUS
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                             disease, 7th ed 1995, P1501
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                   (16) Schutgens, R; Clin Chem 1993, V39, P1632 CAPLUS
                   (17) Shackleton, C; Clin Chim Acta 1976, V69, P267 CAPLUS
                   (18) Shackleton, C; Clin Chim Acta 1976, V67, P287 CAPLUS
                   (19) Shackleton, C; Clin Chim Acta 1980, V107, P231 CAPLUS
                   (20) Shackleton, C; J Chromatogr 1986, V379, P91 CAPLUS
                   (21) Shackleton, C; J Steroid Biochem 1993, V45, P127 CAPLUS
                   (22) Souri, M; Am J Hum Genet 1996, V58, P97 CAPLUS
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                             biochemical genetics. A laboratory manual 1991,
                             P143
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                   (26) Teller, W; Horm Res 1998, V50, P49 MEDLINE
                   (27) Tuchman, M; Clin Biochem 1985, V18, P176 MEDLINE
                   (28) Tuchman, M; Clin Biochem 1987, V20, P173 CAPLUS
                   (29) Tuchman, M; Clin Chem 1983, V29, P828 CAPLUS
                   (30) Verhaeghe, B; Clin Chem 1988, V34, P1077 CAPLUS
     ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         1994:245603 CAPLUS
DOCUMENT NUMBER:
                         120:245603
ENTRY DATE:
                         Entered STN: 14 May 1994
TITLE:
                         Dicarboxylic acid esters of steroids and vitamins
INVENTOR (S):
                         Eugster, Carl; Eugster, Conrad Hans; Haldemann,
                         Walter; Rivara, Giorgio; Zina, Giuseppe
PATENT ASSIGNEE(S):
                         Marigen S.A., Switz.
SOURCE:
                         Patentschrift (Switz.), 38 pp.
                         CODEN: SWXXAS
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         German
INT. PATENT CLASSIF.:
            MAIN:
                         C07J009-00
       SECONDARY:
                         C07D311-72; C07C401-00; A61K031-575
CLASSIFICATION:
                         32-7 (Steroids)
                         Section cross-reference(s): 1, 26, 30
```

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PATENT NO.		KIND	DATE	APPLICATION NO.		DATE
	CH 681891		A5	19930615	CH 1991-3159		19921009
	DE 4319492		A1	19940414	DE 1993-4319492		19930611
	GB 2285805		A	19950726	GB 1994-882		19940118
	ORITY APPLN.				CH 1991-3159	Α	19921009
	ENT CLASSIFIC.						
	rent no.				IFICATION CODES		
	681891		C07J009				
		ICS	C07D311	-72; C07C401	-00; A61K031-575		
		IPCI	C07J000	9-00 [ICM,5]	; C07D0311-72 [ICS,	5];	C07D0311-00
			(ICS, 5,	C*]; C07C040:	1-00 [ICS,5]; A61K	031-	575 [ICS,5]
DE	4319492	IPCI	C07C006	9-34 [ICM,5]	; C07C0069-602 [ICS	; [5,5	C07C0401-00
					B [ICS,5]; C07C0067		
			C07C006	7-00 [ICS,5,0	C*]; C07D0311-58 []	CS,5	1;
			C07D031	1-72 [ICS,5]	; C07D0311-00 [ICS,	5,C*	1;
			C07D030	3-04 [ICS,5]	; C07D0303-00 [ICS,	5,C*];
			A61K003	1-575 [ICS,5]]; C07C0069-38 [IC	, [5];	C07C0069-40
			[ICA, 5]	; C07C0069-43	2 [ICA,5]; C07C0069	-44	[ICA, 5];
			C07C006	9-46 [ICA,5]	; C07C0069-48 [ICA,	5];	C07C0069-00
					7-00 [ICA,5]; B01F0		
			B01F001	7-08 [ICA,5]	; B01F0017-00 [ICA,	5,C*];
					; B01F0017-42 [ICA,		
		IPCR	A61K000	9-107 [I,A];	A61K0009-107 [I,C*]; A	61K0009-16
			[I,A];	A61K0009-16	[I,C*]; C07C0401-00	[I,	A];
			C07C040	1-00 [I,C*];	C07D0311-00 [I,C*]	; C0	7D0311-72
			[I,A];	C07J0009-00	[I,A]; C07J0009-00	[I,C	*]
GB	2285805	IPCI	C07J000	9-00 [ICM,6]	; C07C0401-00 [ICS,	6];	C07D0311-72
	•		[ICS, 6]	; C07D0311-0	[ICS,6,C*]		
		IPCR	A61K000	9-107 [I,A];	A61K0009-107 [I,C*]; A	61K0009-16
					[I,C*]; C07C0401-00		
					C07D0311-00 [I,C*]		
				[I,A]; C07J0009-00			
		ECLA	A61K009	/107D; A61K0	09/16H6F; C07C401/0	0; C	07D311/72:
			C07J009	/00			
OTH	ER SOURCE(S):			120:245603			

ABSTRACT:

Esters of saturated and unsatd. dicarboxylic acids with steroids and vitamin D and E derivs. were prepared for use as neoplasm inhibitors. Thus, bis(cholesteryl) azelaate (I) was prepared by esterifying the acid chloride with cholesterol. In a plate dilution test with PY6 polyoma virus-transformed mouse cells I was active to a dilution of 1:19.2X106.

SUPPL. TERM:	dicarboxylic ester steroid vitamin; antitumor dicarboxylic ester steroid vitamin; ergosterol dicarboxylic ester prepn antitumor; cholesterol dicarboxylic ester prepn antitumor; cholecalciferol dicarboxylic ester prepn antitumor; retinol dicarboxylic ester prepn antitumor
INDEX TERM:	Monlage inhibit
INDEA TERM:	Neoplasm inhibitors
	(dicarboxylic acid esters of steroids and vitamins)
INDEX TERM:	Steroids, preparation
	ROLE: SPN (Synthetic preparation); PREP (Preparation)
	(preparation of dicarboxylic acid esters of)
THORN MADA	(preparation of dicarboxylic acid esters of)
INDEX TERM:	144338-31-8 144338-32-9 146513-06-6 153023-83-7
	153023-84-8 153023-85-9
	ROLE: BAC (Biological activity or effector, except adverse);
	BSU (Biological study, unclassified); BIOL (Biological
	study)
	(antitumor activity of)
INDEX TERM:	123-98-8P, Azelaoyl chloride

ROLE: SPN (Synthetic preparation); PREP (Preparation) (intermediate in preparation of dicarboxylic acid esters of

steroids and vitamins)

153023-61-1P 153023-68-8P INDEX TERM: 153023-70-2P 153023-71-3P

153023-74-6P 153023-75-7P 153023-77-9P 153023-78-0P

153023-80-4P 153023-81-5P 153023-82-6P

ROLE: BAC (Biological activity or effector, except adverse);

BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses)

(preparation and antitumor activity of)

INDEX TERM: 23394-15-2P 23394-16-3P 51027-63-5P 51027-65-7P

65380-14-5P 65380-17-8P 65380-18-9P 143879-02-1P 153023-62-2P 153023-63-3P 153023-64-4P 153023-65-5P 153023-66-6P 153023-67-7P 153023-69-9P 153023-72-4P 153023-73-5P 153023-74-6P 153023-76-8P 153023-79-1P

153023-87-1P 153023-88-2P 153023-89-3P 153023-90-6P 153023-91-7P 153023-92-8P 153023-93-9P

153023-94-0P 153023-95-1P 153023-96-2P 153023-97-3P 153023-98-4P

153023-99-5P 153024-00-1P 153024-01-2P 153024-02-3P 153024-03-4P 153151-46-3P 153151-47-4P 153151-48-5P

153151-49-6P

ROLE: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

INDEX TERM: 50-14-6, Ergocalciferol 57-87-4, Ergosterol

123-99-9, Azelaic acid, reactions 5205-39-0 ROLE: RCT (Reactant); RACT (Reactant or reagent)

(reactant, in preparation of dicarboxylic acid esters of

steroids and vitamins)

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:52677 CAPLUS

DOCUMENT NUMBER: 112:52677

ENTRY DATE: Entered STN: 17 Feb 1990

The "survival hormones": azelaic and pimelic acids, TITLE: suppress the stress elicited by isolation conditions

on the steroids and phospholipids of adult worker

honeybees

AUTHOR (S): Jorand, J. P.; Bounias, M.; Chauvin, R.

Lab. Biochim., INRA, Montfavet, F-84140, Fr. CORPORATE SOURCE:

SOURCE: Hormone and Metabolic Research (1989), 21(10), 553-7

CODEN: HMMRA2; ISSN: 0018-5043

DOCUMENT TYPE:

Journal LANGUAGE:

English CLASSIFICATION:

12-6 (Nonmammalian Biochemistry)

ABSTRACT:

The kinetics of abdomen, hemolymph, and thoracic muscle steroid and phospholipid concns. were determined in adult worker bees kept for 0-12 h starving in darkness, either grouped by 8 (controls) or strictly isolated, or isolated in presence of a piece of cotton impregnated with 1 μg azelaic acid and 1 μg pimelic acid, the so-called survivones which restore the lifespan of isolated bees. The dynamics of both steroids and phospholipids strongly deviates in isolated bees relative to controls. The introduction of survivones completely restored the variations of hemolymph steroids of hemolymph and thorax phospholipids of isolated bees to exactly similar features as in controls. The action of the lipoic hormones survivones thus involves the participation of lipid metabolism

SUPPL. TERM:

honeybee survival hormone isolation stress; survivone isolation stress honeybee; azelaic acid isolation stress honeybee; pimelate isolation stress honeybee; steroid honeybee survival hormone; phospholipid honeybee survival hormone

INDEX TERM:

Phospholipids, biological studies Steroids, biological studies ROLE: BIOL (Biological study)

(of honeybee tissues, isolation stress depletion of,

survival hormones restoration of)

INDEX TERM: Digestive tract

Fat body Hemolymph

Muscle, composition

(phospholipids and steroids of, in isolation stress in

honeybees, azelaic and pimelic acids effect on)

INDEX TERM: Honeybee

(phospholipids and steroids of, isolation stress depletion of, survival hormones restoration of)

INDEX TERM: Stress, biological

(isolation, phospholipids and steroids of worker

honeybees depletion by, survival hormone restoration of)

INDEX TERM: Insect hormones and growth regulators

ROLE: BIOL (Biological study)

(survivones, phospholipid and steroid composition of worker

honeybee restoration by, in isolation stress)

INDEX TERM: 111-16-0, Pimelic acid 123-99-9, Nonanedioic acid,

biological studies

ROLE: BIOL (Biological study)

(phospholipid and steroid composition of worker honeybee restoration by, in isolation stress)